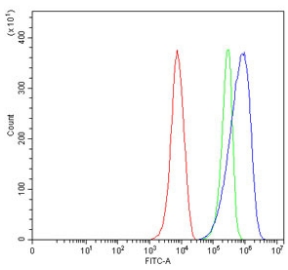
Aim2 Antibody (RQ6928)

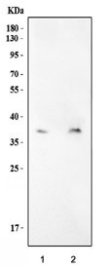
Catalog No.	Formulation	Size
RQ6928	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q91VJ1
Applications	Western blot: 0.5-1 ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This Aim2 antibody is available for research use only.



Flow cytometry testing of mouse RAW264.7 cells with Aim2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Aim2 antibody.



Western blot testing of mouse 1) RAW264.7 and 2) NIH 3T3 cell lysate with Aim2 antibody. Predicted molecular weight ~39 kDa.

Description

Interferon-inducible protein AIM2, also known as absent in melanoma 2 or simply AIM2,is a protein that in humans is encoded by the AIM2 gene. It is mapped to 1q22. AIM2 is a member of the Ifi202/IFI16 family. It plays a putative role in tumorigenic reversion and may control cell proliferation. Interferon-gamma induces expression of AIM2. Though there has been virtually no biochemistry performed, a model based on cell-based or in vivo experiments has led to the current model of how AIM2 triggers the inflammasome. The C-terminal HIN domain binds double stranded DNA (either viral, bacterial, or even host) and acts as a cytosolic dsDNA sensor. This leads to the oligomerization of the inflammasome complex. The N-terminal pyrin domain of AIM2 interacts with the pyrin domain of another protein ASC (or Apoptosis-associated Speck-like protein containing a caspase activation and recruitment domain). ASC also contains a CARD domain (caspase activation and recruitment domain), that recruits procaspase-1 to the complex. This leads to the autoactivation of caspase-1, an enzyme that processes proinflammatory cytokines (IL-1b and IL-18).

Application Notes

Optimal dilution of the Aim2 antibody should be determined by the researcher.

Immunogen

Recombinant mouse Aim2 protein (amino acids Q136-E354) was used as the immunogen for the Aim2 antibody.

Storage

After reconstitution, the Aim2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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